REMARKS

Rejections under 35 U.S.C. § 103

Claims 1-27 and 35-39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,486,201 (hereinafter referred to as "Canfield") and in view of U.S. Patent No. 6,104,954 (hereinafter referred to as "Blunsden") and further in view of U.S. Patent No. 5,601,608 (hereinafter referred to as "Mouchawar").

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the applied reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP § 2143. Applicant respectfully submits that the applied references do not satisfy these criteria.

Applicant has cancelled claims 1-27 without prejudice. Applicant reserves the right to pursue claims 1-27 in one or several continuing applications. Due to the cancellation, the rejection of these claims is now moot and, hence, is not addressed herein.

Applicant has amended claim 35. The amendment is supported by the original application. No new matter has been entered.

Claim 35 is directed to a method of operating a neurostimulator device that has a plurality of electrodes and a respective blocking capacitor coupled to each of the plurality of electrodes. The method comprises:

> generating a first stimulation pulse by a pulse generator of the neurostimulator device and applying the first stimulation pulse to living neural tissue using a first electrode pattern;
>
> generating a reverse pulse by the pulse generator and applying the reverse pulse according to the first electrode pattern to discharge blocking capacitors having retained charge after the first stimulation pulse, wherein a pulse width of the reverse pulse is longer than a pulse width of the first stimulation pulse and an amplitude of the reverse pulse is lower than an amplitude of the first stimulation pulse; and
>
> after the blocking capacitors are discharged, generating a second stimulation pulse by the pulse generator and applying the second stimulation pulse to living neural tissue using a second electrode pattern;

wherein each of the first and second electrode patterns are defined by respective sets of stimulation parameters stored in memory of the neurostimulator device that are cyclically retrieved by a processor of the neurostimulator device to control pulse generation operations of the neurostimulator device, wherein the pulse generation operations cause a patient to experience substantially concurrent application of pulses according to the first and second stimulation pulses.

Canfield, Blunsden, Mouchawar explicitly discuss various cardiac stimulation systems, although Canfield discloses that its discharging circuitry could be applied generally in an "implantable medical device." However, none of these references teaches or suggests a neurostimulation system implementing the method of claim 35. For example, the applied references do not teach or suggest first and second electrode patterns "defined by respective sets of stimulation parameters stored in memory of the neurostimulator device." The applied references also do not teach or suggest generating pulses according to such electrode patterns. Specifically, there is no reason disclosed in the applied references why it would useful to apply stimulation pulses according to different electrode patterns to cardiac tissue. There is no teaching or suggestion to apply the first and second stimulation pulses in a "cyclical manner" to "cause a patient to experience substantially concurrent application of pulses according to the first and second stimulation pulses."

Moreover, there is no teaching or suggestion to apply a "reverse pulse" as claimed to "to discharge blocking capacitors having retained charge after the first stimulation pulse" between the cyclically applied first and second stimulation pulses. Also, there is no motivation in the applied references for applying a "reverse pulse" during the cyclical application of the first and second stimulation pulses as claimed.

Applicant respectfully submits that claim 35 is patentable over the applied references. Claims 36-39 depend from claim 35 and, hence, are likewise patentable.

Conclusion

Applicant respectfully submits that the application is in condition for allowance and requests the Examiner to pass the application to issue.

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Respectfully submitted,

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